Pursuant to the authority vested in California Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-19-095;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2020	LPKXL04.4SU1	4.4	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Engine Control Module, Diesel Oxidation Catalyst, Periodic Trap Oxidizer, Exhaust Gas Recirculation, Exhaust Pressure Regulator, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst	Crane, Loaders, Tractor, Dozer, Pump, Compressor, Generator Set

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW ≤ 560	Tier 4 Final	OPTIONAL STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		FEL	N/A	N/A	N/A	N/A	0.01	N/A	N/A	N/A
		CERT	0.01	0.39	--	0.2	0.004	--	--	--

BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has complied with the more stringent set of standards from the various power categories in conformance with Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for New 2011 and Later Tier 4 Off-Road Compression-Ignition Engines, Part I-D" adopted October 20, 2005 and last amended October 25, 2012.

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed ~~at El Monte, California~~ on this 22ND day of April 2020.

Allen Lyons, Chief
Emissions Certification and Compliance Division

Engine Model Summary Template

EO#: U-R-022-0235
Attachment page 1 of 2
Date: 03/18/2020

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
LPKXL04.4SU1	5094/2200 Parent	1204J-E44TTA/C4.4	200@2200	148.9	72.2	608@1400	177.9	54.9	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	4938/2200	1204J-E44TA/C4.4	110@2200	82.17	39.8	332@1400	97.04	29.9	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	4940/2200	1204J-E44TA/C4.4	131@2200	96.19	46.6	391@1400	113.55	35.0	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	4942/2200	1204J-E44TA/C4.4	122@2200	90.12	43.7	369@1400	107.73	33.2	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	4944/2200	1204J-E44TA/C4.4	114@2200	85.62	41.5	369@1400	107.31	33.1	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	4946/2200	1204J-E44TA/C4.4	148@2200	109.14	52.9	413@1400	120.73	37.3	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	4948/2200	1204J-E44TA/C4.4	124@2200	91.6	44.4	391@1400	113.71	35.1	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	4950/2200	1204J-E44TA/C4.4	137@2200	100.24	48.6	413@1400	120.39	37.1	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	4952/2200	1204J-E44TA/C4.4	142@2200	104.53	50.7	413@1400	120.3	37.1	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	4954/2200	1204J-E44TTA/C4.4	157@2200	117.4	56.9	524@1400	151.9	46.9	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	4956/2200	1204J-E44TTA/C4.4	174@2200	127.5	61.8	553@1400	159.6	49.2	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	4958/2200	1204J-E44TTA/C4.4	150@2200	112.9	54.7	479@1400	139.1	42.9	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	4960/2200	1204J-E44TTA/C4.4	141@2200	104.56	50.7	465@1400	133.7	41.3	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	4964/2200	1204J-E44TTA/C4.4	186@2200	135.7	65.8	608@1400	173.4	53.5	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR

TAA = TA + CAC

Engine Model Summary Template

EO#: U-R-022-0235
Attachment page 2 of 2
Date: 03/18/2020

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
LPKXL04.4SU1	6260/2200	1204J-E44TTA/C4.4	174@2200	127.1	61.6	601@1400	172.4	53.2	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	6262/2100	1204J-E44TTA/C4.4	157@2100	116.7	54.0	589@1400	171.8	53.0	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	6320/1800	1204J-E44TTA/C4.4	173@1800	144.7	57.4	505@1800	144.7	57.4	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR
LPKXL04.4SU1	6324/1500 Parent	1204J-E44TTA/C4.4	168@1500	167.6	55.4	587@1500	167.6	55.4	DDI, TAA, ECM, DOC, PTOX, EGR, SCR, AMOX, EPR

TAA = TA + CAC